When the object is to have the bones in such a state as to produce an immediate effect upon the first crop, and which will be continued during many years, it is better to treat them as will be hereafter shown, so as to bring their animal matter into an incipient state of putrefaction, improperly called by

some fermentation. (3.)

I have had some experience in the application of dry bones to land, and have also been able to collect the opinions of many who have extensively applied them in this manner. It has the advantage of saving time and labor, but requires a larger dose to produce a given effect upon the *first* crop. Its effects, however, are more lasting, and will continue during a long series of years. This method may answer when the ground is intended to be kept permanently in grass. Gypsum should always be mixed with them in the proportion 1 bushel to 10 of bones.

The system of dissolving in acid, I have been always satisfied, is less advantageous than the putrefactive process, and

therefore I have never used the dissolved bones.

In a paper read before the meeting of the British Association, at Dublin, in 1857, Sir J. Murray claims that he was the originator of the practice of using dissoved bones more than forty years ago. Long experience, however, in the use of them has induced him to change his opinion upon that subject, and he now objects to the use of dissolved bones. He states that he finds "the soluble phosphates too soluble; that they melt "too fast, and are carried into the subsoil or pass off into "streams during rains."

He adds that his "present views result from many years "experience," and "that they have been confirmed by a "long series of experiments, carried on for him by the gov"ernor as well as the gardener of the Richmond (England)

"Lunatic Asylum."

The prompt action of dissolved bones upon crops brought them prominently into notice, and induced many farmers to prepare and use them, and, besides, induced a host of parties to prepare them on a large scale to save the farmers the trouble of so disagreeable a process, and not without danger. I am fully convinced that if any one will take the trouble to make proper comparative experiments with dissolved and putrified bones, and notice the results, during five or ten years, they will come to the same conclusion as Sir J. Murray did, who has the candor to acknowledge the errors into which he has led his brother farmers.

The books and periodicals for years past contain numerous directions for dissolving bones, and it is remarkable that they should differ so greatly in the proportions of acid re-

quired.